



9200/2164  
#7

Attorney Docket No.: ER-035-US-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mueller Art Unit: 2164  
Serial No.: 09/193,889 Examiner: R. Weisberger  
Filed: November 18, 1998  
Title: MOISTURE ACTIVATED REINFORCEMENT STRING AND TEAR  
OPENING TAPES FOR CORRUGATED AND CARTON STOCK  
CONTAINERS

Assistant Commissioner for Patents  
Washington, D.C. 20231  
**BOX PETITIONS**

PETITION UNDER 37 CFR 1.181(a) REQUESTING WITHDRAWAL OF THE  
HOLDING OF ABANDONMENT

In response to the Notice of Abandonment dated November 7, 2001, Applicants hereby petition for withdrawal of the holding of abandonment.

Remarks

On March 16, 2001, Applicants submitted a timely response to the November 16, 2000 Office action by facsimile transmission. Applicants received confirmation that the 11 pages that made up the response had been successfully transmitted to facsimile number (703) 872-9310, (see, Facsimile transmission confirmation sheet at Tab 1 (1 page)). The response included the following documents:

Certificate of Transmission by Facsimile pursuant to 37 CFR 1.8 (Tab 2, 1 page);  
Combined Amendment and Petition for One Month Extension of Time (Tab 3, 3 pages); and  
Amendment (Tab 4, 7 pages).

Applicants submit that these documents demonstrate that a reply to the outstanding Office action dated November 16, 2000, was timely submitted. Accordingly,

**CERTIFICATE OF MAILING BY FIRST CLASS MAIL**

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

November 19, 2001

Date of Deposit

*Allison Johnson*

Signature

*Allison Johnson*

Typed or Printed Name of Person Signing Certificate

Applicants submit that the holding of abandonment is unwarranted and request that it be withdrawn.

Please charge any fees or credit any over payments to Deposit Account No. 501,171.

Respectfully submitted,

Date: November 19, 2001

Allison Johnson  
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## CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)

Applicant(s): G. Mueller et al.

Docket No.

ER-035-US-01

Serial No.	Filing Date	Examiner	Group Art Unit
09/193,889	11/18/98	R. Weisberger	1774

## Invention:

MOISTURE ACTIVATED REINFORCEMENT STRING AND TEAR OPENING TAPES FOR CORRUGATED AND  
 CARTONSTOCK CONTAINERS

I hereby certify that this Combined Amendment & Petition for Extension of Time to 11/16/00 Office Action  
 (Identify type of correspondence)

is being facsimile transmitted to the United States Patent and Trademark Office (Fax. No. 703-872-9310)

on March 16, 2001  
 (Date)

Carrie M. Arcand

(Typed or Printed Name of Person Signing Certificate)

(Signature)

- 11 Pages -

Note: Each paper must have its own certificate of mailing.

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**CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)**

Applicant(s): G. Mueller et al.

Docket No.

ER-035-US-01

Serial No.  
09/193,889Filing Date  
11/18/98Examiner  
R. WeisbergerGroup Art Unit  
1774

Invention:

**MOISTURE ACTIVATED REINFORCEMENT STRING AND TEAR OPENING TAPES FOR CORRUGATED AND CARTONSTOCK CONTAINERS**

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(Date)

**Carrie M. Arcand**

(Typed or Printed Name of Person Signing Certificate)

(Signature)

**- 11 Pages -**

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**COMBINED AMENDMENT & PETITION FOR EXTENSION OF  
TIME UNDER 37 CFR 1.136(a) (Large Entity)**

Docket No.  
ER-035-US-01

In Re Application Of:  
G. Mueller et al.

Serial No.  
09/193,889

Filing Date  
11/18/98

Examiner  
R. Weisberger

Group Art Unit  
1774

Invention:

**MOISTURE ACTIVATED REINFORCEMENT STRING AND TEAR OPENING TAPES FOR CORRUGATED AND  
CARTONSTOCK CONTAINERS**

**TO THE ASSISTANT COMMISSIONER FOR PATENTS:**

This is a combined amendment and petition under the provisions of 37 CFR 1.136(a) to extend the period for filing a response to the Office Action of 11/16/00 in the above-identified application.

The requested extension is as follows (check time period desired):

One month       Two months       Three months       Four months       Five months

from: 2/17/01      Date      until: 3/16/01      Date

The fee for the amendment and extension of time has been calculated as shown below:

**CLAIMS AS AMENDED**

	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	21 -	20 =	1	x \$18.00	\$18.00
INDEP. CLAIMS	2 -	3 =	0	x \$80.00	\$0.00
FEE FOR AMENDMENT					\$18.00
FEE FOR EXTENSION OF TIME					\$110.00
TOTAL FEE FOR AMENDMENT AND EXTENSION OF TIME					\$128.00

COMBINED AMENDMENT & PETITION FOR EXTENSION OF  
TIME UNDER 37 CFR 1.136(a) (Large Entity)

Docket No.  
ER-035-US-01

The fee for the amendment and extension of time is to be paid as follows:

A check in the amount of **\$128.00** for the amendment and extension of time is enclosed.

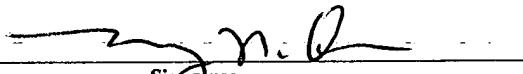
Please charge Deposit Account No. **06-2241** in the amount of **\$128.00**  
A duplicate copy of this sheet is enclosed.

The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. **06-2241**  
A duplicate copy of this sheet is enclosed.

Any additional filing fees required under 37 C.F.R. 1.16.

Any patent application processing fees under 37 CFR 1.17.

If an additional extension of time is required, please consider this a petition therefor and charge any additional fees which may be required to Deposit Account No. **06-2241** A duplicate copy of this sheet is enclosed.

  
Signature

Nancy N. Quan  
Reg. No. 36,248

Dated: 3/16/01

I certify that this document and fee is being deposited on 3/16/01 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

*faxed in*

*Signature of Person Mailing Correspondence*

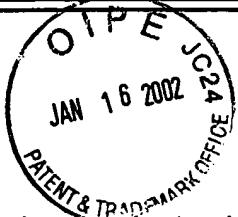
Carrie M. Arcand

*Typed or Printed Name of Person Mailing Correspondence*

cc:

COMBINED AMENDMENT & PETITION FOR EXTENSION OF  
TIME UNDER 37 CFR 1.136(a) (Large Entity)

Docket No.  
ER-035-US-01



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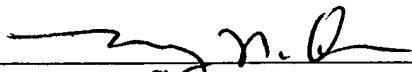
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A duplicate copy of this sheet is enclosed.  
 Any additional filing fees required under 37 C.F.R. 1.16.  
 Any patent application processing fees under 37 CFR 1.17.

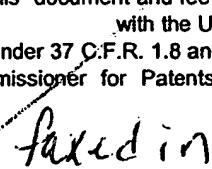
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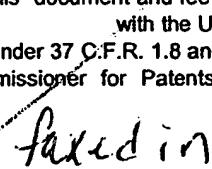
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Dated: 3/16/01

Nancy N. Quan  
Reg. No. 36,248

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Signature of Person Mailing Correspondence

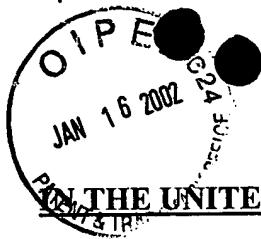
Carrie M. Arcand

Typed or Printed Name of Person Mailing Correspondence

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mueller et al.

Examiner: R. Weisberger

Serial #: 09/193,889

Group Art Unit: 1774

Filed: November 18, 1998

Docket: ER-035-US-01

Title: MOISTURE ACTIVATED REINFORCEMENT STRING AND TEAR  
OPENING TAPES FOR CORRUGATED AND CARTONSTOCK  
CONTAINERS

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AMENDMENT UNDER RULE 111

Assistant Commissioner for Patents  
Washington D.C. 20231

Dear Sir:

This paper is in response to the Office Action of 11-16-00.

AMENDMENT

Please cancel Claims 1-16 without prejudice.

Please amend Claims 17 and 18 as follows to place them in independent form.

17. (amended) A method of reinforcing a container having at least two layers comprising:

- a) providing [the continuous fibrous composite of Claim 1] a continuous fibrous composite comprising a continuous fibrous substrate coated on at least one surface with a moisture activatable adhesive composition;
- b) positioning said continuous fibrous [substrate] composite between at least two layers of said container during manufacture; and
- c) exposing said layers to moisture such that a fiber tearing bond is formed between said composite and at least one of said layers.

18. (amended) A method of reinforcing a container comprising:

- a) providing [the continuous fibrous composite of Claim 1] a continuous fibrous composite comprising a continuous fibrous substrate coated on at least one surface with a moisture activatable adhesive composition;
- b) moistening said continuous fibrous [substrate] composite; and
- c) positioning said continuous fibrous [substrate] composite on the surface of a container.

**Please add the following new claims:**

19. (new) The method of Claim 17 wherein said adhesive composition is a remoistenable adhesive.
20. (new) The method of Claim 19 wherein said adhesive composition is a hot melt remoistenable adhesive.
21. (new) The method of Claim 18 wherein said adhesive composition is a remoistenable adhesive.
22. (new) The method of Claim 21 wherein said adhesive composition is a hot melt remoistenable adhesive.
23. (new) The method of Claim 17 wherein said adhesive composition has humidity resistance.
24. (new) The method of Claim 19 wherein said remoistenable adhesive composition is coated on at least two opposing surfaces of said composite.
25. (new) The method of Claim 18 wherein said composite is positioned on the surface forming a handle of said container.

26. (new) The method of Claim 17 wherein said composite is a tape ranging in width from about 0.2 mm to about 90 mm.
27. (new) The method of Claim 17 wherein said composite is a string ranging in size from about 0.5 mm to about 5 mm.
28. (new) The method of Claim 17 wherein said fibrous substrate is comprised of fiberglass, polyester, rayon, nylon, aramide fiber, a woven web, a non-woven web, and mixtures thereof.
29. (new) The method of Claim 17 wherein the softening point of the fibrous substrate is greater than about 170°C.
30. (new) The method of Claim 17 wherein said adhesive composition is a dried remoistenable water based adhesive having humidity resistance.
31. (new) The method of Claim 17 wherein said adhesive composition comprises at least 50% moisture activatable ingredients.
32. (new) The method of Claim 17 wherein said adhesive composition comprises at least one moisture activatable polymer.
33. (new) The method of Claim 23 wherein said adhesive composition is nonblocking at 38°C and 90% relative humidity.
34. (new) The method of Claim 20 wherein said adhesive composition comprises:
  - a) from about 10 wt-% to about 90 wt-% of at least one crystalline water sensitive thermoplastic polymer;
  - b) from about 10 wt-% to about 90 wt-% of at least one amorphous water sensitive thermoplastic polymer;
  - c) up to about 30 wt-% of at least one wax.

35. (new) The method of Claim 18 wherein said adhesive composition has humidity resistance.
36. (new) The method of Claim 35 wherein said adhesive composition is nonblocking at 38°C and 90% relative humidity.
37. (new) The method of Claim 22 wherein said adhesive composition comprises:
  - a) from about 10 wt-% to about 90 wt-% of at least one crystalline water sensitive thermoplastic polymer;
  - b) from about 10 wt-% to about 90 wt-% of at least one amorphous water sensitive thermoplastic polymer;
  - c) up to about 30 wt-% of at least one wax.

#### REMARKS

Claims 1-16 are canceled. Claims 17 and 18 are rewritten in independent form. The only amendments to Claims 17 and 18 are made to reflect the correct antecedent basis. No new matter is added.

New Claims 19-37 have been added. Claims 17- 37 are now pending. Examination and reconsideration of the application is respectfully requested.

Support for new Claims 19-24, and Claims 26-37 can be found through out the specification and also in Claims 1-16 as filed, now canceled. Support for new Claim 25 can be found on p.7, lines 15-16. No new matter has been added.

#### 1. Restriction requirement under §121

Claims 1-15 (group I), Claim 16 (group II), and Claims 17-18 (group III) are subject to a restriction requirement under 35 USC §121: group I is drawn to a continuous fibrous composite; group II is drawn to a container and group II is drawn to a method of reinforcing a container. These groups are alleged to be distinct and unrelated.

Applicants elect group III with traverse. Applicants confirm the election to prosecute group III, Claims 17-18 at this time and reserve the right to prosecute groups I and II at a later time.

Applicants submit that while the groups are independently patentable, they are nevertheless related through the common type of continuous fibrous composite.

Applicants further submit that even though the three groups are classified differently, it will not be an undue burden for the Examiner to examine all three groups at one time, as the same classes and subclasses are subject to search. Applicants respectfully request reconsideration.

## 2. Rejection under §102

Claims 17-18 are rejected under 35 USC §102(b) as being anticipated by Wosaba al el, US Pat. No. 4,784,271.

Applicants respectfully traverse the rejection.

As pointed out by the examiner, Wosaba et al discloses "a shipping carton that can be readily opened... without having to use a knife or other sharp instrument.... "See col. 2, lines 25-31. "The sidewalls have a line of severance running circumferentially around the carton....", and a combination of a wide tape having an adhesive coating and a narrow tear filament or strip is attached to the sidewalls' outer surface over the butt joint. See col. 2, lines 32-40. Opening is accomplished by splitting the wide tape to separate the top and bottom sections. See col. 2 lines 40-44. The adhesive can be a pressure-sensitive, heat-activated or water-activated adhesive. See col. 4, lines 38-40. The wide tape has the adhesive coating and the narrow tear filament or strip is without an adhesive, supra. Thus, the filament or strip is not self-adhered to the container.

In contrast, the present invention discloses a method of reinforcing a container using a continuous fibrous composite comprising a fibrous substrate coated with a moisture activatable adhesive. Thus, the reinforcing composite of the present invention is for reinforcing a container, and not to be used as a tear filament or strip to split a wide tape holding together two sections of a container that have a line of severance running circumferentially around. The present invention also discloses tear opening tape systems

coated with a moisture activatable adhesive. See p. 3, lines 27-30. However, any opening will involve tearing through the container material and not just splitting a wide tape.

Further, the reinforcing composite of the present invention is not made up of a wide tape having an adhesive coating and a narrow tear filament or strip without an adhesive, as disclosed in Wosaba et al. In Wosaba et al, since the tear filament is not itself coated with an adhesive, it requires a wide tape to attach it to the container walls. In the present invention, the fibrous substrate itself is coated with an adhesive to form a fibrous composite, and is self-adhered to the container wall. Thus, the fibrous composite of the present invention can be positioned either between the layers of the container or on the surface of the container without the aid of another tape.

Therefore, Applicants respectfully submit that the present invention is distinguished from Wosaba et al, and request that the rejection under 35 USC §102(b) should be withdrawn. The adhesive coating of the filament and its direct adhesion to a layer or surface of the container is not taught in the reference, Wosaba et al.

### §103

Applicants further submit that the present invention is not obvious in view of Wosaba et al.

While Wosaba et al mentions that the adhesive for the wide tape can be water-activated, there is no teaching or motivation in Wosaba that the adhesive can be directly coated onto the tear filament or strip. On the other hand, the reinforcing composite of the present invention comprises a moisture activatable adhesive coated directly onto the fibrous substrate.

Also, the tear filament or strip in Wosaba is not for reinforcing, as is the reinforcing composite of the present invention.

Further, apart from mentioning that a water-activated adhesive can be used, there is no discussion of what the adhesive is. On the other hand, the moisture activatable adhesive useful for the present invention is formulated to have a balance of moisture sensitivity needed to activate the adhesive, and humidity resistance to prevent or minimize blocking, as discussed in the disclosure. See p. 6, lines 6-15; p.18, lines 1-5; and Examples and test results. In fact, while the moisture-activated adhesive can be

activated by the moisture present in the corrugating process, the reinforcing composite does not block under high humidity. See p. 6, lines 6-7, and lines 10-12; p.17, lines 4-6; and Examples and test results.

In addition, the adhesive of the fibrous composite of the present invention is also different from heat-activated adhesive in that it can be applied without heat while possessing all the desirable properties of heat resistance of heat activated adhesives. See p. 6, lines 20-24. It also prevents problems associated with the hot melt being forced out beyond the edges of the corrugated board. See p.3, lines 27-30, and p.4, lines 1-3.

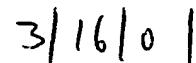
Therefore, there is no teaching or motivation in Wosaba et al to arrive at the present invention and the present invention is thus not obvious in view of Wosaba et al.

### 3. Conclusion

In view of the above, it is submitted that the application is in condition for allowance. Reconsideration of the rejection is respectfully requested and allowance of Claims 17-37 at an early date is solicited.

Respectfully submitted,

  
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Date